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ABSTRACT

This collection of abstracts is part of a continuing series providing information on recent doctoral dissertations. The 22 titles deal with a variety of topics, including the following: (1) the relationship of reading achievement to self-concept in third and fourth grade gifted students; (2) perceived teacher effort and student achievement in reading; (3) the effect of team teaching upon achievement in and attitude toward mathematics and English; (4) the relationship between selected learning independence characteristics and reading achievement in third grade students; (5) reading achievement in single-grade versus multigrade classrooms; (6) the effect of family environment on elementary school children's reading achievement; (7) peer influence as a factor in student reading preferences; (8) effects of adjusted teaching strategies on reading achievement of impulsive third grade students; (9) self-concept, anxiety, and learning from reading; and (10) parents' perceptions of their roles and needs as related to their children's reading development. (RL)

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Reading Achievement:

Characteristics Associated with Success and Failure:

Abstracts of Doctoral Dissertations Published in Dissertation Abstracts International, July through December 1981 (Vol. 42 Nos. 1 through 6)

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Abstracts of the following dissertations are included in this collection:

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Blomenberg, Paula Marie
A COMPARISON STUDY OF SELECTED CONTEXTUAL VARIABLES IN INDIANA IN 1944-1945 AND 1976 IN VIEW OF THEIR RELEVANCE TO THE READING ACHIEVEMENT OF SIXTH AND TENTH GRADE STUDENTS

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A STUDY OF THIRD AND FOURTH GRADE GIFTED STUDENTS' READING ACHIEVEMENT AND ITS RELATIONSHIP TO THEIR SELF-CONCEPT

Order No. 8122587

ANDREWS, JANE A. BAUER, ED.D. *The University of Nebraska - Lincoln*, 1981. 85pp. Adviser: O. W. Kopp

The purpose of the study was to determine if there was a difference in self-concept of two groups of gifted students: (1) third and fourth grade students who were identified as gifted achievers in reading and (2) third and fourth grade students who were identified as gifted underachievers in reading.

Forty subjects were selected from five elementary schools. They were randomly selected from a pool of ninety-four gifted students who had at least an intelligence quotient of 133 on the Slosson Intelligence Test or at least 134 on the Stanford-Binet Intelligence Scale.

The forty gifted students were identified as gifted achievers or gifted underachievers in reading based on the stanine scores taken from the 1977-1978 Metropolitan Achievement Test. Those who placed in the eighth or ninth stanines on all reading areas were identified as achievers in reading. Those who placed in the seventh stanine in one or more skill areas were identified as underachievers.

Data for the self-concept was collected by administration of an oral self-concept inventory developed by Dinkmeyer. The data was analyzed in terms of the following hypothesis: Gifted third and fourth grade achievers in reading will score higher on the self-concept measure than gifted underachievers in reading. Fisher's Test for uncorrelated data was used and t was significant at $p < .025$. Given that the mean self-concept score was higher for achievers than underachievers in reading, the hypothesis was validated.

Conclusions. The results of the current study suggest that there was a significant relationship between reading achievement and self-concept in gifted students. The nature of the relationship in terms of cause and effects remains uncertain. The question needs to be raised as to whether the gifted underachiever's performance is directly related to a low self-concept or whether chronic underachievement precipitated the low self-concept. This needs to be examined, while recognizing the academic achievement depends upon complex interrelationships between intelligence, personality, social class values, peer relationships, parental environment, and school environment. Each case needs to be considered and evaluated on an individual basis.

In order to discern the nature and extent of each student's problem, educators would want to consider the scope, the duration, the effects of the problem, and the gap existing between aptitude and achievement. Based on these findings the school would need to consider the following questions: (1) Is an intervention program warranted? If so, would individual counseling, group counseling, parent involvement or some other form of intervention hold the greatest promise for providing successful intervention? (2) Does it appear that the root of the problem is so deeply embedded that referral or collaboration with other professionals is warranted? (3) Would the student profit by modifying the content of the material, the method of instruction, the nature of the learning environment, or a combination of the three?

Whatever steps are taken, a humanistic approach is of the utmost importance in helping underachievers feel better about themselves and their performance.

A COMPARISON STUDY OF SELECTED CONTEXTUAL VARIABLES IN INDIANA IN 1944-1945 AND 1976 IN VIEW OF THEIR RELEVANCE TO THE READING ACHIEVEMENT OF SIXTH AND TENTH GRADE STUDENTS Order No. 8114937

BLOMENBERG, PAULA MARIE, ED.D. *Indiana University*, 1981. 274pp. Chairperson: Dr. Roger Farr

Researchers, the public, and the media have focused considerable attention on the comparison of reading achievement over time. Unfortunately, these comparisons have primarily examined test scores and tended to ignore corresponding study of contextual factors. A thorough description of these factors would contribute to a better understanding of the two periods and perhaps indicate whether substantive changes in variables were interrelated and responsive to changing societal needs.

A recent comparison study of the reading achievement of Indiana students (Farr, Fay, & Negley, 1978) is an example of one of the reading trends studies that primarily examined test score data. This study provided an excellent opportunity for a study to be made of the contexts in Indiana during 1944-1945 and 1976, the two periods when students were assessed.

An emergent variable design was adopted. This design is one in which variables were determined as the data were gathered and analyzed. Because a seemingly infinite array of contextual variables was identified during the data collection process, parameters had to be set to make the study feasible. Four guidelines to select variables were developed and a rationale for each established.

Application of the first three guidelines selected 143 variables. Application of the fourth guideline--availability of data about a variable from both periods--eliminated 83 of these variables. Thus, the final variable list included 65 variables. These were grouped in clusters for reporting purposes--demographic and socioeconomic factors; characteristics of the schools, teachers, and pupils; and characteristics of the curricula. The data were collected through two qualitative methods--content analysis of written documents such as state and federal government reports and interviews--and validated through the process of triangulation.

The findings of the study support four major conclusions that have implications for future research. First, substantial changes were found between the 1940s and 1970s in all 65 contextual variables investigated. It is recommended that other important contextual variables should be studied as it is probable that they evidenced similar changes. Investigating additional variables will yield an even more comprehensive description of the influential contexts in which learning takes place.

Second, comparison studies of achievement that rely on test scores in isolation and ignore corresponding study of the contexts do not yield information of valid use for purposes such as deciding policies or judging the condition of education because of the substantial changes in the contexts, the complex interrelationship among the contextual variables, and inability to establish causal relationships between variables and achievement. It is recommended that comparison studies should only be conducted when a rich description of the "then and now" contexts is included and targeted reasons have been established for the investigation.

Third, major differences were noted in the variables not only between periods but also within each period. The complex interrelationship and the variability make it impossible to parcel out educational achievement from the other variables and study it in isolation. It is recommended that data about the contextual variables be gathered concurrently in any achievement study.

Fourth, this investigation provides an alternative structure for research because data were included that had been collected by both qualitative and quantitative inquiry techniques. It is recommended that researchers should use alternative methods in tandem when studying aspects of education.

This study clearly indicates that schools in Indiana were responsive to the societal needs of each period. Since schools are to serve society, American schools and educators must continue to adjust and reflect the current needs of society.

DESCRIPTIVE HISTORICAL BACKGROUND AND POSSIBLE FACTORS AFFECTING READING ALOUD Order No. 8116850

BONDI, EDITH FRIEDLAENDER, PH.D. *East Texas State University*, 1981. 111pp. Adviser: Mary L. Jernigan

Purpose of the Study. The major purpose of this study was (1) to determine the essential features of practices for reading aloud during the period 1966 to 1980, (2) to describe factors that affect reading aloud proficiency, (3) to make recommendations for a systematic reading aloud program in elementary curricula, and (4) to provide suggestions for the most promising avenues of further research in oral reading.

Procedure. The 1966 to 1980 period was divided into five time periods. Professional literature on oral reading was surveyed for articles and/or studies pertaining to oral reading. Obtained information was catalogued into the categories of practices in oral reading and factors affecting oral reading proficiency. Based upon the specific purpose, this information was then catalogued into three distinct practices and three distinct categories of factors. The three practices were catalogued as Instruction and Diagnosis, Communication, and Fine Arts. The three categories of factors were catalogued as Symbols, Physical Behavioral, and Transmission Factors. The resulting information was analyzed and recorded with and across the time periods used for the study.

Findings. I. Three major functions of reading aloud occurred during the period of 1966 to 1980. (A) The functions were instruction in reading and diagnosis of student performance such as: omissions, substitutions, repetitions, insertions, reversals, other perception skills, and comprehension of the printed page, while reading aloud. (B) The functions were communication techniques of oral expression, speed, listening, breathing, articulation, or pitch to strengthen communication with choral reading, reading prepared stories, sharing book reports, poetry, and puppetry, while reading aloud. (C) The functions were fine arts performances in music, literature, drama and theatre, combined with reading aloud. II. Three

major categories of functions were cited as possibly affecting reading aloud proficiency. The (A) One category represented symbols. (B) One category represented physical behavioral factors. (C) One category represented transmission factors.

Recommendations. As a result of the study of reading aloud practices (1966-1980), the following recommendations for future research are presented: (1) The development of a systematic program of oral reading in elementary school curricula. (2) The study of the impact of reading aloud on readers' comprehension and retention. (3) The study of the effects of internal factors on the reading aloud process, such as students' five senses. (4) The study of external factors affecting reading aloud process, such as posture, time, symbols, light, and color.

EFFECTS OF EXAMPLES AS CONTEXT ON LEARNING NEW INFORMATION FROM EXPOSITORY MATERIALS

Order No. 8127552

BRITTI, NIRMALA G., PH.D. *University of Illinois at Urbana-Champaign*, 1981. 136pp.

Two studies are reported dealing with the effects of context on reading comprehension and information gain of fifth graders using expository materials. In Experiment 1, the simple physical science principle of pulleys was presented in three different forms. For the subjects in the no-context condition, the principle was explained with no example. In the other two conditions, the passage described pulleys as a component part of construction cranes and fence tighteners. Since most of the subjects knew about construction cranes, but did not know about fence tighteners, the former was named the familiar example context condition and the latter became the unfamiliar example context condition. Subjects' existing knowledge of the principle of pulleys was tested three weeks prior to the presentation of the passage.

Results of Experiment 1 indicated that subjects in the no-context condition performed significantly better on a free recall measure and on a ten item short answer test than subjects in the familiar example and unfamiliar example context conditions. They also gained significantly more information about pulleys. It was found that subjects with less prior knowledge of pulleys gained significantly more information about pulleys than subjects with more prior knowledge of pulleys but only for questions testing literal comprehension. With inference questions, subjects with high prior knowledge of pulleys performed better than those with low prior knowledge.

In Experiment 2, three versions of passages dealing with pulleys and gears were constructed, namely, a no-context version, a familiar example context version and a fictitious example context version. In the familiar example context condition, the principle of pulleys and gears were presented as a part of construction cranes and bicycles respectively. In the fictitious example context condition, the same principles were explained as parts of strange tools used by Martians. Certain perceptual changes were included to eliminate possible extraneous factors contributing to the results of Experiment 1.

Results of Experiment 2 complemented those of Experiment 1. For all measures, the mean of the no-context condition was higher than that for the other two conditions, and it was significantly so for the free recall measure.

In conclusion, it would seem that fifth graders can learn more information about a novel scientific concept when it is presented directly without the contextual support of an example. Possibly what happens in the contextual conditions is that the young learner has a difficult time extracting the new and relevant information from an example.

PERCEIVED TEACHER EFFORT AND STUDENT ACHIEVEMENT IN READING

Order No. 8112915

EGAN, MARGARET THERESA, ED.D. *Yeshiva University*, 1981. 196pp.

This study investigated the relationship between perceived teacher effort and student achievement in reading. This study was partly a replication of Blair's (1975) investigation of teacher effort-student achievement relationships in a New England school system. Blair's findings supported the theory that teacher effort in teaching is associated with student achievement in reading.

The present study was conducted with an urban nonpublic school population of students and teachers in New York State. Twenty-six principals rated their perceptions of 139 teachers' effort on "The Teacher Effort Scale in Reading." The reading scores of 2,078 third through sixth-grade students in Title 1 and Nontitle 1 schools were also examined.

The questions explored in the study were: (1) Is there a significant difference between the reading achievement scores of students in self-contained classes and a randomly chosen comparison sample of students from cross-class groups at the upper primary and middle grade levels? (2) Is there a significant difference between the reading achievement scores of upper primary and middle grade students? (3) Is there a significant difference between the reading achievement scores of students of high effort and low effort teachers at the upper primary and middle grade levels? (4) Is there a significant difference between the reading achievement scores of students in Title 1 and Nontitle 1 schools? Will there be significant differences between the scores of students of high effort and low effort teachers within Title 1 and Nontitle 1 schools?

A four-way analysis of covariance tested the significance of differences and interaction effects of the dependent and independent variables. The dependent variable was the students' 1979 SRA reading achievement scores; the independent variables were class organization, grade level, teacher effort and student SES. The two covariates were the 1978 SRA scores and years of teacher experience.

The findings of the data analysis indicated no statistically significant difference between the reading achievement scores of students in self-contained classes and the cross-class comparison sample. There was a significant difference between the reading scores of upper primary and middle grade students. High teacher effort in teaching reading, as described through principals' ratings, was statistically significant in fostering higher student reading scores especially at the middle grade level where the greater positive effect was observed. The negative effects of low effort teaching were more pronounced at the upper primary grade level. There was a statistically significant difference between the reading scores of Title 1 and Nontitle 1 students. In addition, there was a significant difference between the scores of students of high effort and low effort teachers within the Title 1 sample only. The covariate, years of teacher experience, was significant in its relationship to students' achievement scores.

The findings of the study have suggested that teacher effort in reading is consistently associated with student achievement. These results lend additional credibility to theories that emphasize the importance of the teacher variable in reading. Thus, the study has important implications for the selection and training of teachers.

THE EFFECT OF TEAM TEACHING UPON ACHIEVEMENT IN AND ATTITUDE TOWARD MATHEMATICS AND ENGLISH

Order No. 8117231

FORD, KARYN MARIE, PH.D. *Michigan State University*, 1981. 108pp.

Team teaching, which grew from the teacher shortage of the 1950's and survived the shift to teacher surplus, has proved to be an enduring innovation; yet, its support has been derived more from affirmation than through validation based on empirical evidence. Supporters of the team approach claim that it promotes development of a positive attitude toward subject while sustaining cognitive achievement. This study was an attempt to evaluate the effectiveness of the team teaching method versus the traditional method in advancing student achievement and evolving a positive attitude toward subject in mathematics and English so that more informed decisions regarding the continuation of the team environment in the Linden Senior High School could be made.

A review of the literature intimated that no clear or consistent data existed to support or refute that team teaching is superior to traditional teaching in promoting superior cognitive or affective outcomes.

The instrumentation utilized in this study to ascertain cognitive growth and data on attitudes toward subject consisted of the SRA Achievement Series, forms E and F/Red Level, mathematics and English subtests, and the Youth Questionnaire.

The subjects used in the study were freshmen students randomly scheduled by computer into the team or traditional sections of mathematics or English.

The English team taught group evidenced consistently lower achievement than did the English traditionally taught group in all subtest areas. The team teaching environment affected lesser achievement at a significant level in reading and in vocabulary when the data were analyzed for the total treatment group.

In mathematics, the traditional environment produced higher achievement in math concepts than did the team teaching environment, but not at a significant level. Achievement did prove significant in math computation when the data were analyzed for the total treatment group with the team taught group regressing more severely than the traditional group.

The results from the Youth Questionnaire failed to provide conclusive evidence that either environment affected attitude change at a significant level except for a negative change in the team taught students' attitude toward the importance of high grades in English, which was significant

when analyzed for the total group. Responses from both treatment groups in English and mathematics clustered in the average to below average range.

The study evidenced little significant difference between the team taught and the traditionally taught students in either achievement or feelings of competency in subject. The tendency for the team taught group to achieve less and for the traditional group to have more positive attitudes was consistent in both mathematics and English. The study intimated that the team environment was less successful than the traditional environment in producing cognitive or affective growth, although not at statistically significant levels except in isolated subtest areas.

THE CONCEPT FORMATION PERFORMANCE OF ACHIEVING AND NON-ACHIEVING READERS IN THE FIRST, SECOND, THIRD AND FIFTH GRADES

Order No. 8115872

FRASCH, CLIFFORD ALLAN, PH.D. *Temple University*, 1980. 130pp. Major Adviser: Dr. Elizabeth Davis

The major purposes of this study are to determine if there are any differences in the ability of high intelligence and average intelligence achieving readers and high intelligence and average intelligence non-achieving readers to form concepts, and to respond at concrete, functional and abstract levels and in their tendencies to be rigid or flexible when presented with a new conceptual task. Subjects for this study were classified as achieving and non-achieving readers depending on their performance on both an informal and a standardized measure of reading. The subjects were selected from the first, second, third and fifth grade population of an urban school district in the Mid-Atlantic states. The final sample consisted of 25 achieving and 25 non-achieving readers from each grade level who were divided into four groups according to intelligence. The Gelb-Goldstein-Weigl-Scheerer Object Sorting Test (1941) and the Gelb-Weigl-Scheerer Color Form Sorting Test (1941) were used to measure performance concept formation. The Similarities subtest of the WISC (1949) was used to measure verbal concept formation.

Results. Within the limitations of this investigation, the groups of achieving and non-achieving readers in the first, second, third and fifth grades did not differ statistically on the verbal and performance measures of concept formation employed in this study. Therefore, the basic hypotheses were not rejected.

Conclusions. Within each grade the groups of achieving and non-achieving readers, grouped according to intelligence, seem to be more alike than different in terms of their concept formation when the results of their responses were analyzed statistically. Noteworthy trends were found, however, that suggest that differences exist between achieving and non-achieving readers in their ability to form concepts and in their ability to conceptualize at levels measured in this investigation that may be of practical value.

Object Sorting Test. (1) Achieving readers in all of the grades tend to make conceptualizations on the abstract level more frequently than do non-achieving readers who tend to make conceptualizations on the concrete level more frequently than do achieving readers. (2) The non-achieving readers in all of the grades tend to make incorrect sortings of objects and give incorrect verbalizations for their sortings more frequently than achieving readers.

Similarities subtest of the WISC. (1) The achieving readers in all of the grades tend to make conceptualizations on the abstract level more frequently than do non-achieving readers and the non-achieving readers in all of the grades tend to make conceptualizations on the concrete level more frequently than do achieving readers. (2) Achieving readers in the fifth grade tend to make correct verbalizations more frequently than non-achieving readers in the fifth grade.

Color Form Test. (1) Non-achieving readers tend to respond to the concrete aspects of each of the objects more frequently than achieving readers. (2) Achieving readers in the first, second and third grades tend to note the common characteristics of all of the objects more frequently than non-achieving readers. (3) Achieving readers in all of the grades were more flexible in shifting to a new method of grouping than non-achieving readers.

THE HOME ENVIRONMENT AND ITS RELATIONSHIP TO LATER ACHIEVEMENT IN READING COMPREHENSION IN RURAL SOUTH CAROLINA

Order No. 8123413

GAMBLE, MARGARET JONES, PH.D. *University of South Carolina*, 1981. 54pp.

This study examined the home environment and its relationship to the child's later achievement in reading comprehension.

The sample for this study was comprised of seventy-two fourth grade children presently attending an elementary school in rural Clarendon County, South Carolina. The investigator requested and was granted permission to conduct the study using the entire fourth grade population as the sample.

A letter of explanation, along with the Parent Information Questionnaire and Home Support Inventory, was sent home to the parent(s) of all fourth grade children who had on file a score on the comprehension section of the reading test of the Comprehensive Tests of Basic Skills.

The Pearson Product Moment Correlation Statistical Procedure was used to test the six hypotheses in the study. The first and second hypotheses, which predicted a positive relationship between achievement in reading comprehension and levels of income and education of the parent(s), were upheld by the data. Statistically significant inverse relationships were indicated between comprehension scores and family size and birth order, as predicted by hypotheses three and four. The fifth hypothesis which predicted a positive relationship between comprehension scores and the subject's involvement in a preschool program was also upheld by the data.

The only hypothesis not supported by the data was hypothesis six. No statistically significant relationship was revealed between comprehension scores and home support by the parents. As the level of home support increased there was not a corresponding increase in reading comprehension scores. Although the study found no corresponding increases, the results do not necessarily conclude that the home environment is insignificant to achievement in reading comprehension. The items on the Home Support Inventory did not address the qualitative aspects of the home environment which previous studies have shown to be significantly related to achievement. Specifically, information with respect to the qualitative aspects of parent-child interactions was not addressed in the present study. Therefore, one may conclude from the results that in the particular setting in which this study was conducted, the items on the Home Support Inventory, as a whole, were not significantly related to later achievement in reading comprehension.

A STUDY OF THE RELATIONSHIP BETWEEN SELECTED LEARNING INDEPENDENCE CHARACTERISTICS OF THIRD-GRADE STUDENTS AND THEIR READING ACHIEVEMENT

Order No. 8114589

HAYES, VIRGINIA B., ED.D. *The University of North Carolina at Greensboro*, 1980. 210pp. Director: Dr. Barbara D. Stoodt

The purpose of this study was to develop a scale to measure the learning independence of third-grade students and to determine the relationships between the independence measure and the student variables which follow: reading performance, intelligence, sex, educational level of mother, and income level of parents. Another purpose of the study was to determine the relationship between personality traits of teachers and two variables: Learning Independence Scale (LIS) scores assigned to students by the teachers and reading scores obtained by students on a standardized reading test.

The subjects were 187 third-grade students and eight classroom teachers. Students were rated by their teachers on 23 indicators of independence. The classroom teachers were administered a personality profile. Demographic data obtained from school records included IQ, sex, educational level of mother, income level of parents, and reading scale score from the California Achievement Test.

Descriptive statistics were employed to describe the variables in terms of a measure of central tendency (mean) and variability (standard deviation). The analysis of variance procedure in conjunction with Duncan's Multiple Range Test was employed to test the significance of differences between and among groups for the educational level of mothers and the income level of parents. Correlational statistics were used to obtain reliability coefficients and to determine internal consistency for the Learning Independence Scale. Regression analysis was employed to examine the relationship between the variables to determine whether combinations of the variables could be used to predict reading scores and learning independence.

The study revealed that there were significant relationships between total learning independence ratings assigned to students and such factors as the students' reading scores ($p < .0001$) and intelligence quotients ($p < .0001$), the educational level of the students' mothers ($p < .0001$), and the income level of the students' parents ($p < .001$). The study revealed that the intelligence quotients, sex, and educational level of the students' mothers can be combined to predict learning independence ratings of third-grade students; and that intelligence quotients, LIS ratings, and sex of students can be combined to predict the reading performance of students.

No significant correlation was found between the self-reported personality traits of teachers and the reading performance of students. A significant relationship was not observed between LIS ratings and sex of students.

In conclusion, the results indicate that teachers can reliably measure learning independence of third-grade students. There is a significant relationship between this measured student trait and the reading performance of students, intelligence quotients, educational level of students' mothers, and income level of the parents.

THE RELATIONSHIP OF INDIVIDUAL STUDENT TIME ALLOCATION TO READING AND MATHEMATICS ACHIEVEMENT

Order No. 8107839

JACOBSON, KERRY RAY, PH.D. *The University of Wisconsin - Madison*, 1980. 209pp. Supervisor: Professor Richard A. Rossmiller

The major purposes of this study were: (1) to determine whether there were differences in student use of time in elementary schools; (2) to determine whether students who spend more time in reading and mathematics classes exhibit greater gains in reading and mathematics achievement; and (3) to determine whether there are "quality" measures of time which are related to achievement gains. It was hypothesized that the ways in which individual students utilized time would be related significantly to their achievement gains. Students were stratified by several background variables to determine the relationship of background characteristics to time allocation measures.

The major hypotheses of the study were: (1) The total number of minutes a student spends in reading and mathematics instruction has no significant relationship with that student's gains in reading and mathematics achievement scores. (2) The total number of minutes a student is on task in reading and mathematics has no significant relationship with that student's gains in reading and mathematics achievement scores. (3) The total amount of teacher time which a student receives in reading and mathematics has no significant relationship with that student's gains in reading and mathematics scores.

Data were collected on 200 third-grade students at three separate elementary schools in Wisconsin. Time utilization data included classroom observations at three separate periods during the 1979-80 school year. Achievement gains were determined from pre- and post-tests. One-way analyses of variance were used to determine the relationships between background characteristics and time allocation measures. Pearson product-moment correlations were calculated to test the major hypotheses.

The major findings and conclusions follow. (1) Significant differences existed in the amount of time available to individual students in reading and mathematics classes. (2) Allocated time in reading and mathematics varied significantly by school. (3) Students with greater amounts of allocated time exhibited significantly greater achievement gains in mathematics. (4) Individual students varied widely in their time-on-task rates in reading and mathematics. (5) Time-on-task rates in reading and mathematics were significantly related to the student's school, teacher, and ability level. (6) The actual amount of student time on task in reading and mathematics was related to the school the student attended. (7) Nonspecial students with greater amounts of time on task exhibited significantly greater achievement gains in mathematics. (8) Individual students received significantly different amounts of teacher time in reading and mathematics. (9) The amount of teacher time a student received in reading and mathematics was related to the student's teacher. (10) Lower-ability level students received significantly more teacher time in reading than did either high- or medium-ability level students. Medium-ability students received more teacher time than did high-ability students. (11) The amount of teacher time an individual student received in relation to other students varied by the method used to calculate teacher time. (12) Students with greater amounts of weighted teacher time exhibited less achievement gain in mathematics.

A COMBINED EXPERIMENTAL AND DESCRIPTIVE STUDY OF THE EFFECT OF MUSIC ON READING AND LANGUAGE

Order No. 8117801

KELLEY, LINDA LOUISE, PH.D. *University of Pennsylvania*, 1981. 273pp. Supervisor: Morton B. Botel

A combined experimental and descriptive study was carried out to explore the effect of music on the reading/language arts performance of first graders. Children were randomly assigned to one of three groups: Orff-Schulwerk music, visual arts or control. Following premeasures, the music and art groups met three times weekly for thirty minutes from December to May.

Pre and post measures included psychometric and edumetric tests: the Metropolitan Reading Readiness, the California Test of Basic Skills and the Botel Milestones criterion referenced reading test. Related areas of measurement were metalinguistic awareness, auditory-visual integration, following directions and concept development by the Goodenough-Harris "Draw-a-Person" test. Quantitative findings were treated by comparison plotting and analysis of variance, including mean differences, correlation and regression analysis with confidence level determination.

Qualitative procedures and assessments included documentation with field notes, observations, taped teacher: child interviews, monthly work samples, individual background data and assessments for following directions. Qualitative results were treated by retrospective analysis of field notes, interviews, observations and artifacts.

These analyses revealed that the music group began at a statistically significantly lower level that the other two, though undiscriminated by the Metropolitan Reading Readiness test. By the end of the program, they had imporved to the level of the other groups in reading and related areas.

Individual analysis of initially poor performers in all three groups showed that this improvement was not simply a growth spurt, but rather the effect of the music treatment.

The regression analysis revealed the strong impact of music treatment on concept development and reading perfomance, the latter not at a high confidence level. It also revealed a strong, adverse effect of non-English home language on reading, overcome only in the music group. The small number of such children here advises treating this result with caution.

Auditory-visual integration assessment compared success in three game-like tasks for sound reproduction, manipulation, and visual coding with reading stage and metalinguistic awareness, for the music group only. Prereaders were less successful in all three tasks. Levels of success and strategies were directly related to stage in metalinguistic awareness. Visual coding representation demonstrated increasing levels of abstraction from random to number to pattern. Metalinguistic awareness results showed the greatest growth for the music group, demonstrated in phonics activity, oral reading and spelling samples, and language expression.

Retrospective analysis described the effect of music as increasing attentional skills, manipulation-sound/strategy development, development of coordination of modalities, growth in self-concept and cooperation.

A model for the relationship of music to reading is proposed. Combining research in the areas of music, psycholinguistics, auditory-visual integration and Piagetian theory suggests that the child's purposeful cognitive structuring of the material increases success in reading tasks.

It is proposed that music accomplishes this by systematically teaching abstract sound manipulation and sound-to-visual code mapping, by providing structure and organization independent of a phoneme-based system, where the musical note acts as a syllable. Music provides this intersection of coordinating schemata, where the child learns strategies to manipulate and segment the sound and its visual representation.

Final conclusions are that music shows a demonstrated potential for enhancing reading and language development in the first grade. The combined methodologies--quantitative and qualitative--are essential to revealing the phenomena.

AN INVESTIGATION INTO THE EFFECT OF TEACHER EFFECTIVENESS TRAINING UPON STUDENT ACHIEVEMENT IN READING AND MATHEMATICS

Order No. 8120124

LASETER, JESSE CLAUDE, PH.D. *Georgia State University - College of Education*, 1981. 110pp.

Purpose. The purpose of this study was to determine whether or not students would score higher on achievement tests in the areas of reading and mathematics as a result of their exposure to teachers who had been systematically trained to use specific interpersonal skills in their classrooms. The teacher training model used in the study was Thomas Gordon's Teacher Effectiveness Training (TET) module which is designed to teach human relations skills in a 30-hour program.

Methods and Procedures. The subjects in this study were 259 seventh and eighth grade students. The students were exposed to teachers trained in

TET in varying numbers ranging from zero to six. The California Achievement Tests were administered to each student as a pretest and posttest. Each student's monthly personal rate of learning in reading and in mathematics was calculated by taking the students raw scores on the pretest and dividing the score by the student's age in months. The personal rate of learning, considered a predictor of achievement, was used as a covariate in analyzing student achievement gains. Student gain was determined by subtracting the student's pretest score from his/her posttest score.

The analysis of covariance statistical procedure was used to analyze achievement gain as the dependent variable relative to the personal rate of learning as the covariant and the following independent variables: (1) Exposure to TET teachers; (2) Economic status of students; (3) Sex; (4) Race; (5) Grade.

To further analyze the data, two-way, three-way, and four-way interactions were analyzed by analysis of covariance relating exposure to TET to the variables of grade level, race, sex, and economic status of the students.

Results. The two null hypotheses presented in the study were not supported. The data indicates that exposure to TET trained teachers does make a significant difference in student achievement in the areas of reading and mathematics.

Conclusions. The following conclusions were drawn from the study: (1) There was a significant difference in the mean gain in reading achievement scores of students that is attributable to their exposure to teachers who have been trained in TET. (2) There was a significant difference in the mean gain in mathematics achievement scores of students that is attributable to their exposure to teachers who have been trained in TET. (3) The data indicates that the more exposure students have to TET trained teachers, the more their gain in reading and mathematics achievement tests scores. (4) The data of this study suggested that students were likely to learn most from teachers who showed high levels of understanding and respect for their students. (5) This study supported a study by Aspy and Roebuck (1977) which concluded that teachers' interpersonal skills were positively related to students' achievement. (6) Teacher Effectiveness Training was an effective program for training teachers to more effectively utilize interpersonal skills in the classroom. (7) The data of this study were positive and indicated that teachers' interpersonal skills did have a major influence upon student achievement in reading and mathematics. (8) The data suggested that schooling may have more impact on students' performance in mathematics which were less associated with verbal skills that parents might teach or stimulate in the homes. (9) The results of the study suggested that how teachers manage classes was fundamentally related to students' progress in the acquisition of basic skills. (10) Group climate appeared to be an important factor in student learning.

THE EFFECT OF SINGLE-GRADE AND MULTI-GRADE PRIMARY SCHOOL CLASSROOMS ON READING ACHIEVEMENT OF CHILDREN

Order No. 8125455

LINCOLN, ROBERT DOUGLAS, PH.D. *The University of Connecticut*, 1981. 142pp.

The debate surrounding the advantages of certain vertical and horizontal organizational patterns of elementary schools is not new. Determination of whether the multi-grade classroom produces cognitive skill outcomes different from those of the single-grade classroom is particularly important at this time of educational retrenchment.

The purpose of this study are threefold: to fill the longitudinal research void that exists in the assessment of the cognitive effects of school organization on children; to analyze pupil characteristics that are affected by school organizational patterns; and to determine whether the multi-grade classroom produces reading skill outcomes different from those of the single-grade classroom at the primary grade levels. A review of the literature demonstrated that important deficiencies, including the Hawthorne effect, inadequate research design/statistical procedures, and other shortcomings exist in the limited number of research studies comparing single-grade and multi-grade classrooms.

Four hundred two children who completed grade two in 1977, 1978, and 1979 were the subjects of this study. This is an *ex post facto* comparative study with post-treatment observation only utilizing a cohort, nonequivalent group design. Tests for meaningful differences among groups were performed using analysis of covariance and *t*-test procedures, followed by Student-Newman-Kuels's (SNK) *a posteriori* comparison of means when warranted. Certain features of multiple regression analysis as well as nonparametric statistics provided additional interpretation of the data.

The major findings of the study include: (1) Reading achievement test scores do not vary significantly for children who spent first and second grade in single-grade or multi-grade classrooms. (2) The univariate *F*-ratio for the effect of chronological age (within the grade) on reading achievement is insignificant. (3) Although a narrowly significant difference favoring multi-grade was detected for older children within the grade, no other age category produced such differences. (4) The significance of intelligence and sex as predictors of primary school reading achievement is affirmed. (5) Children of low socioeconomic status scored substantially the same in reading as pupils in the average SES category.

The principal implication of this study is that school officials may consider the multi-grade primary grade program a viable alternative to single grades and expect that such placement will not hinder a child's reading attainment.

THE EFFECT OF FAMILY ENVIRONMENT ON ELEMENTARY SCHOOL CHILDREN'S READING ACHIEVEMENT

Order No. 8124311

MARGOLIES, AUDREY GOLD, ED.D. *Hofstra University*, 1981. 107pp.

This study was an effort to identity some factors that influence a child's reading. The specific factors investigated included birth order, parental acceptance and home literary environment.

Related literature concerning the effects of birth order, family relationships and home literary environment was analyzed.

The sample consisted of forty fourth grade children chosen from a middle class Long Island parochial school. The sample consisted of ten first born children, six middle born children and twenty-four last born children. The mothers of the children completed the Porter Parental Acceptance Scale and a Home Literary Environment Questionnaire constructed by the investigator.

Findings indicated that first born children scored significantly higher than last born children in reading achievement as measured by vocabulary. There was no significant difference in reading achievement as measured by comprehension between first birth order children and other children. There were no significant differences as measured by vocabulary or comprehension between middle birth order children and other children. There were no significant differences in reading achievement as measured by vocabulary or comprehension between last birth order children and other children.

Birth order was significant as a main effect for reading achievement as measured by vocabulary. Home literary environment had no significant main effect and there was no significant interaction between birth order and home literary environment for vocabulary.

There was significant interaction between home literary environment and birth order for comprehension. The level of comprehension was significantly higher in the first born birth order group when compared to the last birth order group for high, mid or low home literary environment. The middle birth order children from a low home literary environment were significantly higher in comprehension than last birth order children.

There was a significant main effect for reading achievement as measured by vocabulary for children whose mothers scored high, mid or low on the Porter Parental Acceptance Scale. There were no significant differences in reading achievement as measured by comprehension for children whose mothers scored high, mid or low on the Porter Parental Acceptance Scale.

There were no significant differences in reading achievement as measured by vocabulary or comprehension of children whose parents scored high, mid or low on the Porter Parental Acceptance Scale and of those children who came from a high, mid or low home literary environment.

This study suggested that first born children have higher reading achievement as measured by vocabulary. This study also suggested that parental acceptance and home literary environment may not be as important factors in reading achievement as generally assumed. Reading achievement may involve other factors such as the influences of television stress and elements within the school situation.

The conclusions of this study must be viewed within the limitations of the study.

First born children scored significantly higher in reading achievement as measured by vocabulary than other birth order children. The level of comprehension was higher in the first birth order group when compared to the last birth order group for high, mid or low home literary environment. Middle birth order children scored significantly higher in comprehension than the last birth order children when measured by home literary environment.

The implications for the classroom teacher are that while birth order, parental acceptance and home literary environment are

thought to have an effect on reading achievement, their effect may not be as great as many teachers think. This study suggested that the power of the school environment as well as the significance of the teacher as a catalyst for reading achievement may be greatly neglected.

Further studies are needed to better understand the factors that make a child successful in reading.

PEER INFLUENCE AS A FACTOR IN STUDENT READING PREFERENCES

Order No. 8121630

O'Leary, Patricia Josephine Johnson, Ed.D. *University of San Francisco*, 1981. 166pp. Chairperson: S. Alan Cohen

Statement of the Problem. This study examined the degree of potency that peer or authority identity play in influencing emerging adolescents (grades six and eight). Check-out preferences on new library books were compared by peer or authority recommendation sources, sex-match of the student and the presenter, grade level, sex and achievement level of the student.

Procedure. To investigate these comparisons, three 2 x 2 x 2 completely randomized block factorial designs were used, testing three theoretical hypotheses: (1 & 2) younger students, especially females would be more influenced by (a) an authority than by a peer presentation, (b) a same-sex than an opposite-sex presentation, (3) higher achieving students would be more influenced by an authority presentation than would lower achieving students.

Treatment consisted of four orders of video-taped book-talk presentations, given by two authority figures and two peers. Subjects randomly assigned to one of the four orders of video-talks which were carefully controlled to achieve sameness of script and delivery, by indicating their 1-4 preferences for future book check-out. Score conversions, based on three interval scales, (Peer-Authority-PA, Sex-Match-SM, and combined Peer-authority/Sex-Match-PASM) prepared the data for chi-square cross tabulations by grade level (6 & 8), sex (M & F) and achievement (Hi & Lo). Then three factorial ANOVAS based on the three interval scales (PA, SM and PASM) analyzed the percentage of variance due to main effects, and two and three-way interactions.

Results. Results, with one expectation were not statistically significant. The two-way interaction between sex and grade level, based on the PA scale was significant at .02. However, before beginning this study, treatment effect size (the amount of common within standard deviation necessary to be considered educationally significant) was defined. Game rules setting alpha, beta and effect size were set prior to data collection. Based on these game rules, no hypothesis achieved educational significance.

Conclusions. Implications are to redesign grade levels, using primary-grade students (e.g. grade 3) as the preadolescent comparison group, maintaining the middle-grade students (e.g. grade 8) as adolescent comparison group. With preadolescent students now maturing at a much younger age, a greater age-span seems necessary to detect treatment effects.

THE RELATIONSHIP BETWEEN AURAL CLOZE, PIAGETIAN SPATIAL CONCEPTS, AND READING ACHIEVEMENT AT FIRST GRADE LEVEL

Order No. 8115968

Petkofsky, Ruth Bard, Ed.D. *Temple University*, 1981. 122pp.

The complex process of learning to read involves many interactive factors. Goodman's psycholinguistic theory of reading suggests that meaning can only be extracted from print if the young reader utilizes language knowledge and the cues in written language. The reader must coordinate multiple cues and hypothesize about what is to follow meaningfully in written language.

Piaget's theory suggests that role taking skills and communicative behaviors develop from a centered to a decentered state. Children's orientation to the physical world may be related to their ability to take another's perspective and coordinate multiple cues.

This study focuses on the relationship of two aspects of the accomplishment of the reading process; children's ability to supply deleted words in a story read to them (aural cloze) and ability to coordinate perspectives in the physical world (level of decentration) with beginning reading achievement.

The first grade population of the Caln Elementary School in Coatesville, Pennsylvania served as the subjects of this investigation. Children were individually tested at the beginning of the school year with an aural cloze test prepared by the investigator, and two portions of the Laurendeau and Pinard tests of the development of the concept of space in the child. The same tests were administered at the end of the school year in order to gauge the dependability of measures and stability of variables. The Stanford Achievement Test Battery was also administered at the end of the school year. Statistical Package for the Social Sciences (SPSS) multiple correlation and multiple regression analysis was utilized to analyze the data.

Data analysis yielded these major findings: A significant positive correlation exists between aural cloze scores and reading achievement scores ($r = .35$). A significant positive correlation exists between level of decentration scores and reading achievement ($r = .25$; $r = .27$). A significant positive correlation exists between aural cloze scores and level of decentration scores ($r = .22$; $r = .26$). Aural cloze scores and level of decentration scores together at the beginning of first grade are a better predictor of later reading achievement than either score alone. ($r = .43$). Post hoc analysis revealed these findings: There was a significant difference in performance on the earlier and later aural cloze tests ($M = 64.11$; $M = 72.26$). There was a significant difference between correlations of aural cloze and reading achievment for the earlier and later administered aural cloze tests ($r = .35$; $r = .47$). Correlations between the earlier and later administered Laurendeau and Pinard Tests and reading achievement differed significantly only for concepts of left and right ($r = .27$; $r = .46$).

The results suggest the following conclusions and implications: The variables studied are independent and contribute to some variation in reading achievement. Reading achievement is related to concepts of left and right (projective spatial concepts) at first grade level. Word reading and comprehension, while both components of the reading process, require different levels of cognitive functioning. Reading is a cognitive act and should be taught with emphasis placed on meaning.

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN SELECTED ACOUSTIC ENVIRONMENTS AND SOUND, AN ELEMENT OF LEARNING STYLE, AS THEY AFFECT SIXTH-GRADE STUDENTS' READING ACHIEVEMENT AND ATTITUDES

Order No. 8119620

Pizzo, Jeanne Sottile, Ed.D. *St. John's University*, 1981. 267pp. Mentor: Dr. Rita S. Dunn

Learning style, an emerging theory which proposes the utilization of students' learning styles as the basis for instructional planning, provided the theoretical framework for this investigation.

The purpose of this study was to investigate the relationship between selected acoustic environments and students' diagnosed preferences for sound, one element of learning style, on the reading achievement and attitudes of sixth grade students.

It was hypothesized that students tested in acoustic environments that were congruent with their diagnosed preferences for sound would achieve significantly higher scores than their peers tested in incongruent acoustic environments.

The Dunn, Dunn and Price (1978) *Learning Style Inventory* (LSI) was administered to 125 sixth-grade students attending a middle school in Western Nassau County to diagnose their preferences for sound in the acoustic instructional environment.

Based on those scores, two acoustic preference subgroups were formed: (1) Preference for Quiet, and (2) Preference for Sound. Further delineation based upon sex resulted in four subgroups.

A total of 64 sixth-grade students comprised the sample population for this investigation. Thirty-two male and 32 female subjects identified as having a distinct preference for either quiet or sound were assigned randomly and equally to one of two conditions--quiet and noise--of the experimental variable, acoustic environment. Half were tested in an acoustic environment that was congruent with their diagnosed preference for sound; half were tested in a mismatched situation.

Subjects in both the quiet and noise conditions were administered the Comprehension subtest of the *Gates-MacGinitie Reading Tests* and a semantic differential scale developed by the researcher to measure the attitudes of students tested in acoustic environments congruent/incongruent with their diagnosed preferences for sound.

The sound pressure levels in the quiet condition, when combined with the ambient sound levels in the classroom, varied between 40 and 45 dBA. In the noise condition, an audio-recording tape cassette of unpredictable classroom sound produced from an audio-recording of classroom noises varied between 75 and 80 dBA. It consisted of random intervals of bursts of noise of varying duration, provided in ten one-second steps that occurred in between one and nine-second intervals with interpolated random periods of silence that varied in

three, one-second steps which occurred between one and three seconds.

A posttest-only control group design was employed; subjects diagnosed as having preferences for sound congruent/incongruent with each of the two experimental conditions served as the control group for each condition.

Three-way analyses of variance procedures and *t* tests were the statistical procedures applied to the data.

The findings of this study may be summarized as follows: (1) There was a significant interaction beyond the .01 level between the acoustic environment and individual learning style preference. Specifically, the mean reading comprehension and attitude scores of sixth graders tested in an acoustic environment congruent with their diagnosed learning style preferences for sound were significantly higher than those of their peers tested in an incongruent acoustic environment. (2) There was a significant interaction at the .05 level between learning style preference and sex; males and females tested in acoustic environments congruent with their learning style preferences achieved significantly higher reading comprehension and attitude scores than their counterparts tested in incongruent acoustic environments. (3) There was no significant interaction evidenced between acoustic environment and sex. Therefore, neither sex achieved either significantly higher mean reading comprehension or attitude scores. (4) There was no significant interaction evidenced among acoustic environment, learning style preference and sex.

In the light of these findings, it was concluded that: (1) individuals do differ in their preferences for sound and (2) learning style matching can significantly enhance educational outcomes, lending support to the contention that individuals, rather than males or females, require varying acoustic environments to perform at their optimal levels.

THE RELATIONSHIP OF SELECTED VISUAL PERCEPTION ABILITIES TO THE READING ACHIEVEMENT OF FIRST GRADE STUDENTS

Order No. 8124753

RICHARDSON, KIM MARGARET, PH.D. *Temple University*, 1981. 213pp. Major Adviser: Dr. Stanley Rosner

Despite numerous studies of the relationship of visual perception skills to reading achievement, the precise nature of visual perception and its relationship to reading achievement remain controversial.

Multiple definitions for one term, the lack of a theoretical framework for many studies, the wide range of instruments used to measure aspects of visual perception and reading achievement, and the lack of multivariate studies appear to contribute to the conflict. The purpose of this study was to provide an initial basis for the clarification of the relationship of visual perception to reading achievement.

Three major areas within visual perception which appear to be directly related to the reading process were defined and two major research questions were developed; (a) Is there a difference between the performance of students of high reading achievement and low reading achievement on selected measures of perception of shape, perception of space and perceptual attention? and (b) How much of the variance in reading achievement scores can be accounted for by the selected measures of visual perception?

In the spring of the first-grade year, 62 male children and 65 female children were tested; individually on 17 measures of visual perception and on an informal word recognition inventory, and in small groups on the vocabulary and comprehension subtests of a standardized test of reading achievement.

For the first research question, three multivariate analyses of variance were performed, each analysis comparing high and low achieving readers on the same 17 measures of visual perception. The three analyses differed in the criterion used for identification of high and low readers (word recognition inventory, vocabulary test, comprehension test). A significant difference in the mean vectors of visual perception scores of high and low readers was found in each of the multivariate analyses of variance ($p < .01$). Post hoc comparisons were made using univariate *F* tests and a Discriminant Function Analysis.

For the second research question, three multiple regression analyses were performed, each using a different measure of reading achievement as the criterion variable. The multiple correlation coefficients between the criterion variables and the 17 measures of visual perception ranged from .66 to .80, accounting for 44% to 64% of the variance in the reading scores.

Based on the results of the study, it was concluded that high and low achievers at the beginning reading stage of instruction appear to demonstrate significantly different abilities in visual perception. In all areas of the perception of shape, high achievers demonstrated greater skill than low achievers. This was the case regardless of the measure of reading achievement used to classify high and low achievers. Two abilities in the perception of space were measured in this study and, for both, the high achievers in beginning reading demonstrated greater skill than low achievers. Within the area of perceptual attention, high achievers demonstrated greater skill than low achievers on one measure of perceptual organization. Finally, measures within the perception of shape were larger contributors to the multiple correlation coefficients than measures within perception of space or perceptual attention.

Practical applications include the need for regarding "visual perception" as a composite of skills and focusing diagnosis and instruction on a variety of skills. Specifically, it appears appropriate that the perception of horizontal-vertical orientation of letters continue to be a diagnostic and instructional concern of teachers of pre- and beginning readers, and that structured opportunities be provided for the child to develop an understanding of form constancy and the role of spatial orientation in the accurate recognition of a form.

USING A COMPARATIVE ADVANCE ORGANIZER: THE EFFECT OF IDENTIFIED RELATIONSHIPS ON STUDENTS' EXPECTANCY FOR SUCCESS

Order No. 8123935

RODGERS, CATHY ALLYN, PH.D. *Syracuse University*, 1981. 206pp.

This study was concerned with the effect which a comparative advance organizer has on student expectancy for success and achievement. The research questions were derived from previous research in the following diverse areas: (1) instructional strategies which enhance learning (particularly comparative advance organizers), (2) learner motivation and the effect of expectancy for success, and (3) the influence of academic self esteem on school performance.

Specific predictions were made based on past research conducted in these areas. This was essentially an exploratory study intended to identify those effects, beyond the enhancement of incorporation of new information into cognitive structure, which may result from exposure to an advance organizer. This study was predicted on the assumption that achievement would be enhanced by improving affect toward the learning task as well as by incorporation of information into memory. It was predicted that knowledge of relationships between what is known and what is to be learned would enhance expectancy for success, resulting in increased effort applied to the learning task, and thus improved achievement.

While the predictions that the advance organizer group would exhibit greater enhancement of expectancy for success and achievement than the control group were not supported, the advance organizer did evidence strong effects. In particular, the advance organizer suppressed the positive relationships between esteem and achievement, expectancy for success and achievement, and level of prior knowledge and achievement which are generally found in learning situations. In addition, the positive relationship between level of prior knowledge and expectancy for success, which is predicted in the literature and exhibited by control group members, was reversed among those who read the advance organizer.

This study raises many questions about the ability of an advance organizer to benefit those students most in need of help--students with low academic esteem, low expectancy for success, and poor prior preparation. While it did not provide definitive answers to whether the overt identification of relationships can enhance students' expectancy for success, it indicates that there is much to be learned about the motivational properties of instructional strategies known to enhance learning.

EFFECTS OF ADJUSTED TEACHING STRATEGIES ON READING ACHIEVEMENT OF IMPULSIVE THIRD GRADE STUDENTS

Order No. 8126288

SIMPKINS, LYLA JOYCE LAYNE, ED.D. *Virginia Polytechnic Institute and State University*, 1981. 126pp.

This study was undertaken primarily to investigate the effect of using selected reading strategies (error-analysis record, a self-directed scanning technique, signal words, and sequence words) on the reading performance of impulsive students. In addition to this primary focus, several secondary analyses were conducted, which included an analysis of the kinds of reading errors made by impulsive

children and a comparison of time and error scores on a retest of the Matching Familiar Figures (MFF) test. The subjects were classified as to cognitive style (impulsive, impulsive/field-dependent, not-impulsive) on the basis of the MFF test and the Children's Embedded Figures Test. Subjects were 217 third-grade students selected from two similar elementary schools in southwestern Virgina. For both schools, subjects comprised the total population of third graders. There were 90 subjects in the treatment groups and 127 in the comparison groups. The treatment groups were the focus of specific intervention techniques aimed at helping the impulsive child improve in reading achievement. These techniques were carried out by the regular classroom teacher during the reading period. All subjects, regardless of cognitive style classification, received the adjusted strategies. The Metropolitan Achievement Test, Primary II, Forms F and G, were used as the pretest and posttest measures of reading achievement. The Short Test of Educational Ability was used as a measure of academic potential.

Upon the completion of the treatment period and the analysis of the pretest and posttest data, it was found that the subjects in the treatment groups made greater gains in all areas of reading (word knowledge, word analysis, and comprehension) than the comparison groups. Furthermore, the treatment groups performed significantly better at the $p < .05$ level of probability in the area of comprehension. A retest of the MFF test resulted in the treatment groups significantly slowing their response time and decreasing the error rate. A factor analysis of the kinds of reading errors made by impulsive subjects did not show that the errors made by impulsives were unusually different from those made by the other cognitive-style groups. The difference was mainly in the number of errors made by each cognitive-style group.

The results of the study led to the conclusion that instructional techniques developed on the basis of what is known about cognitive functioning of impulsive children were successful not only in improving reading achievement for impulsive children but for all children. Therefore, instructional techniques such as those used in this study might be considered for use in the primary level reading program.

It is recommended that this study be extended using additional teaching strategies such as a decoding technique and that the study be carried out over a longer period of time. It is further recommended that an additional measure for impulsivity be considered when classifying subjects according to cognitive style.

SELF-CONCEPT, ANXIETY AND LEARNING FROM READING

Order No. 8121858

SOUSA, MARIA DE FATIMA GUERRA DE, PH.D. *The Ohio State University*, 1981. 257pp. Adviser: Professor Marlin Languis

Research on self-concept, anxiety and academic achievement have suggested that self-concept tends to be positively associated with academic achievement. An inverse relationship has been found between anxiety and academic achievement. No research has questioned if these relationships are maintained when specific types of self-concept (i.e., self-concept of academic ability) and situational (as opposed to trait) anxiety (state-anxiety) are considered. Moreover, research on effects of self-concept and anxiety on academic achievement has neglected an important part of this achievement: learning from reading.

The present study observed the effects of self-concept of academic ability (SCA) and state-anxiety (SA-1) on learning from reading (gain of information from text--GIT). In addition, it also aimed to investigate the relationship between SCA and SA-1.

Subjects in this study were fifth-grade children (19 girls and 14 boys) with mean age of 11.2 attending a school located in an area with high density of blue-collar occupations, in central Ohio. The data collection was carried out in March, 1981. All children were given a self-concept of ability scale, the state-trait anxiety inventory (STAI), a pre-cloze test, a text, and a post-cloze test.

Six hypotheses were formulated: (1) An increase in the level of self-concept of academic ability will be positively correlated with the gain of information from text; (2) Controlling for state anxiety, an increase in the level of self-concept of academic ability will be positively correlated with the gain of information from text; (3) An increase in the level of state-anxiety will be negatively correlated with the gain of information from text; (4) controlling for self-concept of academic ability, an increase in the level of state-anxiety will be negatively related with the gain of information from text; (5) an increase in the level of self-concept of academic ability will be negatively related to the level of state anxiety; (6) controlling for gain of information from text, an increase in the level of self-concept of academic ability, will be negatively correlated with the level of state-anxiety.

Correlational analysis (zero order and partial correlation) was performed for the verification of the hypotheses. A weak positive relationship (.13) was found between SCA and GIT. The partial correlation (controlling for SA-1) indicated that SA affected the relationship between SCA and GIT. Overall, the empirical findings of this study did not support the expectation that SCA was positively related with gain of information from text.

The verification of the relationship between (SA-1) and GIT showed a weak and non-significant negative relationship between state-anxiety and gain of information from text (-.13). The partial correlation (controlling for SCA) indicated that the effect of SA on gain was in some way affected by SCA. The overall empirical findings of this study did not support the expectation that state-anxiety was negatively associated with gain of information from text.

The analysis of the relationship between SCA and SA indicated that as expected, self-concept of ability was negatively associated with state-anxiety (-.66, $p \leq .01$). The partial correlation analysis indicated that GIT did not influence the inverse association between SCA and SA-1.

In the discussion of the results important factors that might explain the low coefficient found in the analyses of the effect of both SCA and SA-1 on GIT were considered. In addition to that it was suggested that the empirical findings might have been influenced by a statistical problem at a more general level: the measurement of changes.

PARENTS' PERCEPTIONS OF THEIR ROLES AND NEEDS AS RELATED TO THEIR CHILDREN'S READING DEVELOPMENT

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THOMPSON, BARBARA JEAN, PH.D. *North Texas State University*, 1981. 230pp.

The problem of this study was that parental perceptions of the roles and needs related to their children's reading development had not been successfully investigated. The primary purpose of this investigation was to determine parental perceptions of their roles, influence, and skills most needed to assist them relating to their children's reading development; the information sources on which parental beliefs about their role are founded; factors foreseen by parents that might hinder their involvement in that role; parents' preferred mode of receiving desired information relative to their assistance in their children's reading development; and existing variations in parental perceptions.

A total of 192 randomly-selected subjects participated in the study. All subjects were parents who had children in kindergarten, first, second, or third grades, and responded to the research instrument (questionnaire).

Data consisted of participant responses to a parental questionnaire developed and validated for the purposes of this study. Additionally, demographic data were obtained using the questionnaire, regarding the person completing the questionnaire, the number of parents and children in the home, the educational level of the parent, ethnicity, and the average family income, to determine the separation of groups defined according to these criteria.

Frequencies and percentages were reported for all items on the questionnaire. Stepwise discriminant analysis functions were employed to determine the significance of the separation of groups. To establish the discriminating power that existed in the variables being explored, the Wilk's lambda test of significance was used. Standardized weighting coefficients served to identify the relative contributions the significant variables (responses to items on the questionnaire) made to the differentiation of groups. Percentages of correctly preclassified group members indicated the accuracy of the separation of the groups.

Findings indicated that parents in this study perceive that they are part of their children's reading development, although a significant number do not view themselves as the major influence. The predominant method of assistance used by parents to foster their children's reading development is listening to their children read. Parents do not perceive reading aloud to their children as the most significant method of influence on their children's reading development. Parents believe they influence their children's reading, but are divided in their opinions of whether the influence is more or less than that of the school. Parents want information to assist them in aiding their children's reading development, particularly information concerning phonics. However, perceived lack of time and lack of knowledge are inhibiting factors to parents relative to their involvement in their children's reading development. School teachers are the dominant information source on which most parents base their beliefs relative to their role in their children's reading development. Additionally, individual conferences with the teachers are the preferred mode by parents to receive information relative to their role and needs in their children's reading development.

The results of the discriminant analysis functions indicated that groups of parents defined according to the person completing the questionnaire and the number of parents in the home both form distinct separations for groups based on the analysis of their perceptions. Groups of parents, defined according to the number of children in the home, the parents' educational level, ethnicity, and average family income, did not distinctly separate with the discriminant functions according to their reported perceptions.

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